

DESCRIPTION

Plunger Pumps are designed with a new high efficiency brass patented manifold. Internal components include special thick solid ceramic plungers for long life and durability. Precision cast cooling fins are anodized for maximum heat dissipation. Oversized premium SKF tapered roller bearings and the precision die-cast supports assure proper shaft alignment and maximum life. Valve cages of Ultra-Form provide positive seating and extended life, especially designed for high pressure applications. Two-piece connecting rods are a special alloy aluminum-based material oversized for maximum strength and load disbursement. These pumps are designed for gearbox flex coupled or belt drive systems with a 24mm solid crankshaft. Spinning at 1450 RPM, this pump was designed to deliver 3.96 GPM at 7250 PSI.



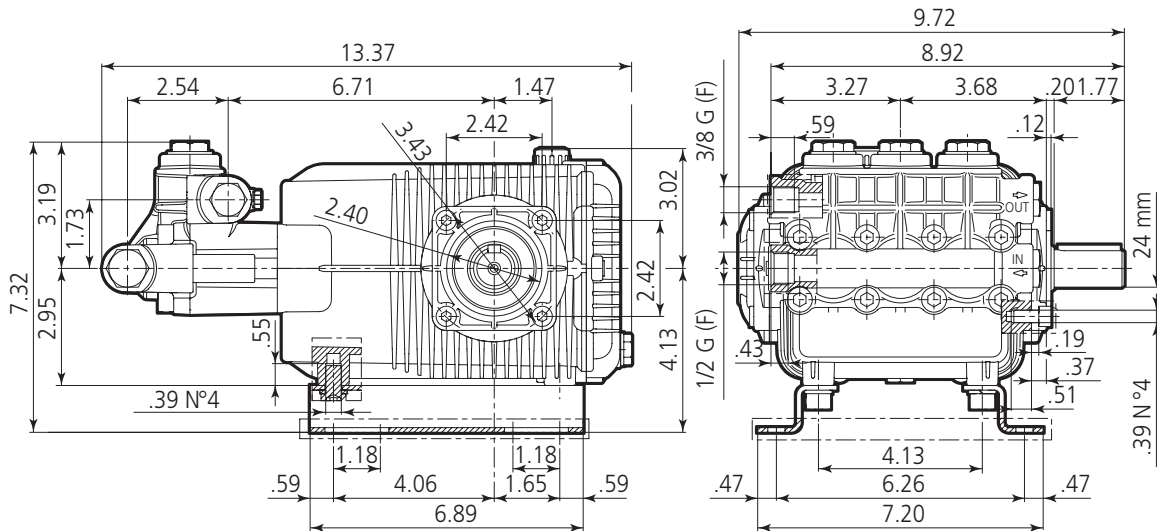
SPECIFICATIONS

| | | | |
|--------------------|--------|------------------------|--------|
| MAX GPM | 3.96 | MAX LMP | 15 |
| MAX PSI | 7250 | MAX BAR | 500 |
| POWER EBHP | 20 | BORE DIA. MM | 18 |
| STROKE MM | 15 | WEIGHT LBS | 29 |
| MAX TEMP | 140° | OIL CAPACITY | 32oz |
| INLET THREAD | 1/2" F | DISCHARGE THREAD | 3/8" F |

DIMENSIONS

SHP

N version
Solid shaft pump ø 24 mm



SPECIAL FEATURES

WET END

- **Manifold:**

- **Forged Brass:** New high efficiency design concept. (Patented) Strength and no porosity = long life.

- Higher Hydrostatic Pressures - Safety, Performance.

- **Inlet and Discharge Ports:** Heavy bosses for added strength. 1/2" Inlet and 3/8" discharge.

- **Offset Discharge Ports:** High efficiency, smooth flow.

- **Bolts:** 8 Bolts, 10mm, grade 8.8

- **Valves:**

- **Valve Caps:** Back-up and O-Ring sealed at the bottom of the cap which increases the hydrostatic strength.

- **Ultra Form Cages with Alignment Pin:** Durable, strength, positive alignment and long life.

- **Poppets, Seat and Spring:** 303 and 400 series stainless steel.

- **Side Mount:** Back-up and O-Ring positive sealing system (No O-Ring wash out).

- **Packing and Plungers:**

- **High and Low Pressure Packing:** "Special profile" style (W-1 & W-2) Buna-N (cotton duct weave base) strong and tightens under load. Top support ring.

- **Support and Guides:** Machined brass, 1-piece construction to assure proper plunger alignment, maximize packing and seal life. The low pressure seal is retained by a plate and snap ring.

- **Plungers:** Are a special aluminum oxide blend, solid ceramic for long life, strong durability and more resilient. Ultra thick with SST retaining bolt.

- **Inlet Valves:** Encapsulated for greater manifold strength (no valve caps) and cylinder efficiency. The inlet valves are internal with side sealing o-ring and back-up rings to increase the overall pump efficiency.

DRIVE END

- **Bearings:** Oversized "SKF" taper for maximum life and load disbursement.

- **Bearing Supports:** Heavy precision die-cast and machined to assure concentricity, alignment and strength.

- **Crankcase:** Precision die-cast, large cross head

for strength, large cooling fins and anodized for maximum heat dissipation.

- **Rear Cover:** Precision die-cast, O-Ring sealed.

- **Oil Level Sight Glasses:** Located in the rear and side cover. Bayonet style sight glass for positive sealing and locking (no threads to loosen). This is an "AR" original.

- **Plunger Rods:** Stainless steel construction for strength (no plating to scrape off), bolt type retainer with a special plunger sealing system.

- **Rod Pins:** Precision ground and hardened steel, oversized for load disbursement.

- **Connection Rods:** Heavy 2-piece special alloy aluminum based, oversized for maximum strength, load disbursement, and life. Heavy pin area construction, for added load strength.

- **Crankshaft:** Forged, precision ground and hardened for extremely long life and durability. Available in 24mm solid gear box drives.

- **Oil Drain:** Quantity of two. One rear cover drain plug, one crankcase bottom drain plug.

- **Oil Seals and O-Rings:** All are constructed of Buna-N rubber. The O-Rings have stainless steel garder springs to assure constant tension on the sealing surface.

- **Oil Capacity:** 32 oz.

EXTRA FEATURES

- **Dyno Proven:** All pumps are dyno tested to assure the theoretical design meets the actual design.

- **Valve Design:** Each pump series has a valve design that optimizes its highest

- **Wet End Repair:** Very simple no special tools are required.

- **Mounting Flanges:** Multiple flanges are available.

- **Design Uses:** Advanced Fluid Handling Computer Programs, Overall Higher Efficiency Pump (Increased Parts Life).